DIAGNOSTIC CATEGORIES TREATED WITH PSYCHIATRIC MEDICATIONS

Psychosis
Depression
Mania/bipolar disorder
Anxiety/panic
Insomnia
ADHD (attention deficit hyperactivity disorder)
Behavioral problems
Dementia
Chemical dependency

PSYCHOSIS

Psychosis is treated with antipsychotics. Psychosis occurs from:

- Schizophrenia
- Bipolar disorder
- Depression
- Drug or alcohol intoxication or withdrawal
- Medical conditions
- Dementia

RELAPSE RATES FOR SCHIZOPHRENIA

Taking antipsychotic medication:	30–50%
Not taking antispychotic medication:	70%

Typical Antipsychotic Medications

Haldol, Prolixin, Trilafon, Stelazine, Mellaril, Thorazine

SIDE EFFECTS **EPRs (extrapyramidal reactions)** include muscle tightening, tremors, a shuffling gait similar to that from Parkinson's disease, and an uncomfortable restless feeling in the body (akathisia). These side effects are treated with varying success with *Cogentin, Benadryl,* or *Artane* (antiparkinsonian drugs) and go away when the antipsychotic is stopped. EPRs are the primary reason patients stop their medicine.

Tardive dyskinesia is characterized by involuntary movement of part of the body (e.g., the mouth and tongue). It is caused by extended use of antipsychotics—which, unfortunately, many patients require. It often does not go away when the medication is stopped.

Atypical Antipsychotic Medications

Clozaril, Risperdal, Zyprexa, Seroquel, Geodon

These drugs cause considerably fewer EPR and tardive dyskinesia problems.

Clozaril (Clozapine) was the first of the atypical antipsychotic drugs and has been effective for people who are not helped by standard antipsychotics. It is the only one that has been proved effective for refractory psychosis.

SIDE EFFECTS One side effect is agranulocytic anemia, in which white cells or infection-fighting cells stop being produced—which can lead to fatal infections if not detected quickly. This is rare, but the white blood cell count must be checked each week. For this reason Clozaril is not used as a first choice but only after two other medicines have failed to work.

The remaining atypical antipsychotics have fewer side effects than Clozaril, and weekly blood draws are not necessary. None of them is as good as Clozaril for patients with refractory psychosis, however.

- *Risperidone (Risperdal)* can cause some EPR and is less sedating.
- *Olanzepine (Zyprexa)* is very effective but can cause weight gain, sedation, and diabetes.
- *Quetiapine (Seroquel)* is controversial as it can cause a bad side effect in the eyes. It is recommended that a special ophthalmology exam be performed before and periodically throughout treatment. It is not clear how often this is actually done in practice.
- *Ziprasidone (Geodon)* is the newest drug on the market. It does not cause weight gain but it is controversial if it causes problems with the beating rhythm of the heart.

DEPRESSION

Overall, approximately 70 percent of patients with depression respond to an adequate trial of antidepressants alone. The neurovegetative symptoms of depression (lack of energy, low motivation) often improve before the mood symptoms, which

usually don't improve for 2 to 4 weeks. This can be a potentially dangerous time for a patient prone to suicide because he or she experiences a return of energy and motivation while still experiencing feelings of worthlessness and guilt.

The general rule for an antidepressant trial is to start with one class of drug and try it for a minimum of 4 to 8 weeks before determining its effectiveness. All the classes discussed below have about equal effectiveness. When prescribing an antidepressant, it is very important to screen for bipolar (manic-depression) disorder. If a patient has a history of mania or is prone to it, the antidepressant may cause him or her to become manic very quickly even if he or she is depressed when the medicine is given.

Selective Serotonin Reuptake Inhibitors (SSRIs)

Prozac, Zoloft, Paxil, Celexa

SSRIs increase the amount of serotonin in the brain, which is believed to affect mood. They are the most popular antidepressants as a first choice, since they work well with minimal side effects. Additionally, an overdose of an SSRI will not cause death. SSRIs have been researched extensively and are now used commonly and successfully for depression, anxiety, panic, obsessive-compulsive disorder, bulimia, and premenstrual dysphoric disorder (premenstrual syndrome, or PMS).

SIDE EFFECTS The main side effects of SSRIs occur at the outset of taking the medication and are usually transient. Side effects include headaches, upset stomach,diarrhea, weight gain, fatigue/apathy, and sweating. Some people experience chronic agitation, insomnia, or sexual problems. (Sexual problems are often not discussed by patients but are very common. Treatment strategies and medications are available to treat sexual side effects, but often with variable results.)

Luvox is an SSRI that has received FDA approval only for the treatment of obsessive-compulsive disorder but has been used for years in Europe for depression.

New Antidepressants

Wellbutrin, Serzone, Effexor, Remeron

Wellbutrin affects norepinephrine and dopamine levels in the brain and has mixed results.

SIDE EFFECTS There is an increased risk of seizures and insomnia, agitation is common, and the drug doesn't control anxiety or panic. However, it does not cause sexual dysfunction. It produces a lower incidence of mania.

Serzone affects serotonin in the brain. The drug has mixed results.

SIDE EFFECTS Serzone does not induce insomnia or create sexual side effects.

Effexor is like the SSRIs but also increases norepinephrine in the brain.

SIDE EFFECTS It has the same side effects as SSRIs and can also cause high blood pressure. New research claims that this is an effective medication for refractory depression (which does not get better with conventional treatments).

Remeron has a wide range of chemical effects, mainly through indirectly increasing norepinephrine.

SIDE EFFECTS It causes a lot of weight gain and sleepiness.

Tricyclics

Tricyclics (TCAs) affect other receptors in the brain related to mood, mainly norepinephrine, and were the most popular prior to SSRIs.

SIDE EFFECTS TCAs have worse side effects than SSRIs. Most commonly, they cause sleepiness and dry mouth. Similar sexual problems are evident, and an overdose can often be fatal. The best known TCAs are *Imipramine* and *Elavil*.

MAO Inhibitors

MAO Inhibitors Nardil (phenelzine) and Parnate (tranylcypromine) are extremely effective, but no one uses them anymore because they can be fatal when mixed with other medications or foods (e.g., wine and cheese).

MANIA / BIPOLAR DISORDER

Mood Stabilizers

Lithium, Depakote, Tegretol

Mood stabilizers prevent the fluctuating depression and mania seen in bipolar disorder.

SIDE EFFECTS These medications can be very dangerous due to potentially toxic side effects and drug interactions. Laboratory monitoring prior to and throughout therapy is required. All mood stabilizers cause significant fetal damage, so it is important to make sure the patient is not pregnant.

Lithium is the original mood stabilizing medication. It is an element on the periodic chart. It is effective 70 percent of the time for acute mania and 70 percent of the time for acute depression. It is being overtaken by Depakote because

Depakote works faster and lithium can "burn out" the thyroid and kidneys over the course of many years.

Depakote is as effective as lithium for mania and is more effective for rapid-cycling mania. It is only 30 percent effective for depression, however—the same as placebo. Depakote works faster than lithium and has fewer side effects (upset stomach and mild sedation are most common), but in very rare cases it can kill a patient's liver with no warning. This rare hepatic toxicity occurs predominantly in very young children.

Tegretol is slightly less effective than lithium and Depakote. It also has many drug interactions, which makes it difficult to give if patients are taking other medications. It has more cognitively related side effects (altered mental status), as well.

The above medications may be combined for refractory cases, but careful monitoring is essential.

Several new medications such as *Neurontin, Topomax,* and *Lomictal* are being studied for use in treating mania.

ANXIETY / PANIC

Benzodiazepines ("benzos")

Xanax, Valium, Ativan, Klonopin

These are calming drugs (similar to alcohol). They also cause sleepiness. They are very addictive, have a numbing effect on feelings similar to that of alcohol, and are recreationally abused for a high. With an acute panic attack, however, sometimes these medications are required.

Antidepressants *(SSRIs* and *tricyclics)* are helpful for anxiety or panic but may take weeks to take effect.

Buspar is an expensive medication and is useful only for low-level "neurotic anxiety."

Agoraphobia, panic, obsessive-compulsive disorder, social phobia, body dysmorphism, eating disorders, and post-traumatic stress disorder can be very broadly grouped together under generalized "anxiety disorder." SSRIs are commonly used for these disorders.

INSOMNIA

Benzodiazepines such as *Xanax, Valium, Ativan, Klonopin,* and *Restoril* are used but can cause addiction or abuse.

Chloral hydrate is also addictive.

Trazadone is nonaddictive. It is a preferred choice for women but can have dangerous side effects for men.

Benadryl and *Vistoril* are both antihistamines that are sedating enough for mild insomnia.

Ambien is a new and effective drug and has properties similar to those of benzodiazepines. It is also addictive and can cause rebound insomnia when discontinued.

DEMENTIA

There are no current medications that really help with dementia. Acetylcholine cholinesterase inhibitors, such as *Aricept*, produce some mild delay in cognitive decline.

Low-dose antipsychotics are often used to treat the behavior problems associated with end-stage dementia.

BEHAVIORAL PROBLEMS

Chronic behavioral problems can occur in Axis II (personality disorders), substance abuse disorders, and developmentally disabled/mentally retarded patients as well as psychotic patients. Axis II disorders are rarely helped with psychiatric medication. Mood stabilizers *(lithium, Depakote,* and *Neurontin)* are used to treat impulse control disorders.

Acute emergency (out-of-control, violent) patients are given high doses of antipsychotics and benzodiazepines.

ADHD (ATTENTION DEFICIT HYPERACTIVITY DISORDER)

Children mainly get amphetamine medications such as *Ritalin, Cylert,* and *Dexedrine*. This helps them concentrate and decreases hyperactivity. Antidepressants and mild sedating medications are also used.

This diagnosis and treatment for adults is very actively debated.

CHEMICAL DEPENDENCY

Alcohol withdrawal and delirium tremors (DTs) are a very dangerous medical situation. Hundreds of people die from this every year, often in the hospital. Patients receive high doses of benzodiazepines when symptoms of withdrawal are present (tremor, increased blood pressure, increased heart rate, sweating, malaise, nausea, vomiting, anxiety, hallucinations) in order to prevent a seizure. Hallucinations are treated with an antipsychotic.

Folate and thiamine are also given to prevent medical conditions that often accompany alcoholism.